Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
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Amendment of Parts 2, 25, and 87 of the Commission's Rules to Implement Decisions from World Radiocommunication Conferences Concerning Frequency Bands Between 28 MHz and 36 GHz and to Otherwise Update the Rules in this Frequency Range	)	ET Docket No. 02-305
	)	
Amendment of Parts 2 and 25 of the Commission's Rules to Allocate Spectrum For Government and Non-Government Use in the Radionavigation-Satellite Service	)	RM-10331

REPLY COMMENTS OF MOBILE SATELLITE VENTURES SUBSIDIARY LLC

Mobile Satellite Ventures Subsidiary LLC ("MSV") hereby files these Reply Comments in the above-captioned proceeding in which the Commission is proposing to make various changes to the domestic allocations in the L-band (1525-1559 MHz (downlink) and 1626.5-1660.5 MHz (uplink)).[1] MSV supports the Commission's proposals to adopt a generic mobile satellite service ("MSS") allocation throughout the L-band and to delete the secondary allocation to aeronautical telemetry in the 1525-1535 MHz band. MSV urges the Commission to retain footnotes US308 and US315 regarding priority and preemptive access in the L-band and to reject Inmarsat's request that the Commission delete footnote US309 which authorizes the operation of terrestrial base stations in the upper L-band to extend or supplement satellite-to-aircraft links.

[1] *Amendment of Parts 2, 25, and 87 of the Commission's Rules, Notice of Proposed Rulemaking*, FCC 02-261, ET Docket No. 02-305 (rel. Oct. 7, 2002) ("*NPRM*").

Background

MSV. MSV is the successor to Motient Services Inc. (f/k/a AMSC Subsidiary Corporation), the entity authorized by the Commission in 1989 to construct, launch, and operate a U.S. MSS system in the L-band.[2] MSV's licensed satellite (MSAT-2, also known as AMSC-1) was launched in 1995, and MSV began offering service in 1996. Today, MSV offers a full range of land, maritime, and aeronautical mobile satellite services, including voice and data, using both MSAT-1 (licensed by Industry Canada to Mobile Satellite Ventures (Canada) Inc.) and MSAT-2 throughout the contiguous United States, Alaska, Hawaii, the Virgin Islands, and coastal areas up to 200 miles offshore.

L-band. In the United States, the L-band has been divided into an upper and lower band. The upper L-band consists of the 1545-1559 MHz (downlink) band and the 1646.5-1660.5 MHz (uplink) band. 47 C.F.R. § 2.106. These bands are allocated domestically to the aeronautical mobile satellite service ("AMS(R)S") on a primary basis. *Id.* In addition, the 1549.5-1558.5 MHz (downlink) band and the 1651-1660 MHz (uplink) band are allocated domestically to MSS on a co-primary basis with AMS(R)S. *Id.* The 1545-1549.5 MHz (downlink) band and the 1646.5-1651 MHz (uplink) band are allocated domestically to MSS on a secondary basis. *Id.* Footnote US308 provides that AMS(R)S requirements that cannot be accommodated in the dedicated AMS(R)S bands (1558.5-1559 MHz and 1660-1660.5 MHz) or in the secondary MSS bands have priority access and real-time preemptive capability over routine, non-safety related public correspondence in the primary MSS bands. 47 C.F.R. § 2.106, footnote US308.

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[2] *Memorandum Opinion, Order and Authorization*, 4 FCC Rcd 6041 (1989); *Final Decision on Remand,* 7 FCC Rcd 266 (1992); *aff'd sub nom. Aeronautical Radio, Inc. v. FCC*, 983 F.2d 275 (D.C. Cir. 1993) ("*Licensing Order*").

The lower L-band consists of the 1525-1544 MHz (downlink) band and the 1626.5-1645.5 MHz (uplink) band. 47 C.F.R. § 2.106. The 1525-1530 MHz band is allocated domestically to MSS on a primary basis. *Id.* The 1530-1544 MHz (downlink) band and the 1626.5-1645.5 MHz (uplink) band are allocated to maritime MSS ("MMSS") and MSS on a co-primary basis. *Id.* The 1525-1535 MHz band is also allocated to the mobile service on a secondary basis, limited to aeronautical telemetry. *Id.* Footnote US315 requires that MMSS distress and safety communications have priority access and real-time preemptive capability in these bands over MSS routine, non-safety related public correspondence. 47 C.F.R. § 2.106, footnote US315.

NPRM. In the above-captioned *NPRM*, the Commission proposes to make three general changes to its allocations in the L-band. First, the Commission proposes to allocate the entire L-band to generic MSS on a primary basis, consistent with the worldwide generic allocation adopted at the 1997 World Radiocommunication Conference ("WRC-97"). *NPRM* at ¶¶ 17-18. If adopted, this proposal would result in the 1525-1559 MHz band being allocated to MSS downlinks on a primary basis and the 1626.5-1660.5 MHz band being allocated to MSS uplinks on a primary basis. *Id.* at ¶ 18. Second, the Commission proposes to delete the secondary mobile allocation from the 1525-1535 MHz band, which is limited to aeronautical telemetry. *Id.* at ¶ 20. Third, the Commission proposes to retain footnotes US308 and US315 but seeks comment on whether to replace footnote US308 regarding priority and preemptive access in the upper L-band with international footnotes 5.357A and 5.362A. *Id.* at ¶ 18.

Comments on NPRM. The Boeing Company ("Boeing") and Inmarsat Ventures plc ("Inmarsat") supported the Commission's proposal to allocate the entire L-band to generic MSS

on a primary basis.[3] Both Boeing and Inmarsat noted that the United States has consistently supported adoption of generic L-band MSS allocations. *See* Comments of Boeing at 5; Comments of Inmarsat at 2.

Boeing and the Aerospace and Flight Test Radio Coordinating Council ("AFTRCC"), who together represent the users of aeronautical telemetry spectrum, supported the Commission's proposal to delete the secondary allocation to aeronautical telemetry in the 1525-1535 MHz band.[4] AFTRCC stated that its members cannot accept the risk of interference that comes with a secondary allocation and that its members have already vacated the 1525-1535 MHz band. *See* Comments of AFTRCC at 2. Similarly, Boeing stated that the 1525-1535 MHz band is unusable for aeronautical telemetry due to the operations of primary users in the band. *See* Comments of Boeing at 7. Inmarsat also supported the proposal to delete the secondary allocation to aeronautical telemetry in the 1525-1535 MHz, both because of harmful interference from MSS to aeronautical telemetry receivers and because of harmful interference from aeronautical telemetry to Inmarsat's mobile earth stations. *See* Comments of Inmarsat at 3-4. Inmarsat argued that a single airborne transmitter would cause harmful interference to an Inmarsat mobile earth station anywhere within its visibility. *Id.* at 4.

Boeing and Inmarsat supported the Commission's proposal to replace footnote US308 with the corresponding international footnotes. *See* Comments of Boeing at 5-6; Comments of Inmarsat at 2. Boeing stated that the international footnotes "generally embrace" the scope of footnote US308 and it would therefore be appropriate for the Commission to simply reference

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[3]Comments of The Boeing Company, ET Docket No. 02-305, RM-10331 (February 10, 2003), at 5-6 ("Boeing"); Comments of Inmarsat Ventures plc, ET Docket No. 02-305, RM-10331 (February 10, 2003), at 2.

[4]*See* Comments of the Aerospace and Flight Test Radio Coordinating Council, ET 02-235, RM-10331 (February 10, 2003) ("AFTRCC"), at 2; Comments of Boeing at 6-7.

the international footnotes instead. *See* Comments of Boeing at 6. Inmarsat argued that footnote US308, as well as footnote US315 pertaining to the lower L-band, are not identical to the corresponding international footnotes and that maintaining both the domestic and international footnotes leads to unnecessary confusion. *See* Comments of Inmarsat at 4-6. In addition, Inmarsat argued that the language in the domestic footnotes implies a requirement for intersystem preemptive capability which Inmarsat noted has been proven to be infeasible. *See id.* at 5.

Finally, on its own motion, Inmarsat proposed that that the Commission delete footnote US309 which permits the operation of terrestrial base stations in the upper L-band to extend or supplement satellite-to-aircraft links. 47 C.F.R. § 2.106, footnote US309. Inmarsat argued that it is unaware of any such terrestrial operations and that the Commission should discourage such terrestrial operations due to congestion in the L-band. *See* Comments of Inmarsat at 6. If the Commission decides to retain the concept underlying footnote US309, Inmarsat proposed that the Commission replace the footnote with international footnotes 5.357 and 5.376. *See id.*

Discussion

I. THE COMMISSION SHOULD ADOPT A GENERIC MSS ALLOCATION THROUGHOUT THE L-BAND

MSV supports the Commission's proposal to allocate the entire L-band to generic MSS. As the Commission states, a generic MSS allocation in the L-band will provide MSS licensees with maximum flexibility without limiting use of this spectrum for distress and safety communications. *NPRM* at ¶ 18. For these reasons, the Commission should adopt its proposal and allocate the entire L-band to generic MSS.

II. THE COMMISSION SHOULD ELIMINATE THE ALLOCATION TO AERONAUTICAL TELEMETRY AT 1525-1535 MHZ

MSV supports the Comments of AFTRCC and Boeing that the Commission delete the secondary allocation to aeronautical telemetry in the 1525-1535 MHz band. *See* Comments of AFTRCC at 2; Comments of Boeing at 6-7. AFTRCC and Boeing state that the 1525-1535 MHz band is simply unusable for aeronautical telemetry operations because of the potential for interference from MSS operations. *See* Comments of AFTRCC at 2-3; Comments of Boeing at 7. Given that aeronautical telemetry users themselves do not support a secondary allocation to aeronautical telemetry in the 1525-1535 MHz band, there appears to be no reason to maintain this allocation.

III. THE COMMISSION SHOULD MAINTAIN FOOTNOTES US308 AND US315 PERTAINING TO PRIORITY AND PREEMPTIVE ACCESS IN THE L-BAND

Despite the claims of Boeing and Inmarsat, MSV sees no benefit to deleting footnotes US308 and US315 and replacing them with the corresponding international footnotes. *See* Comments of Boeing at 5-6; Comments of Inmarsat at 2. The language in footnotes US308 and US315 has been codified for over fifteen[5] and nine years[6] respectively and is reasonably well understood. Changing it now would introduce uncertainty without any apparent benefit.

MSV agrees with Inmarsat that intersystem preemption is not feasible. *See* Comments of Inmarsat at 5. The language in the domestic footnotes, however, does not mandate intersystem preemption as Inmarsat contends. *See id.* Despite the language in the domestic footnotes that

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[5] *Amendment of Parts 2, 22 and 25 of the Commission's Rules to Allocate Spectrum for, and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service for the Provision of Various Common Carrier Services, Memorandum Opinion and Order*, 2 FCC Rcd 6830 (November 9, 1987).

[6] *Amendment of Part 2 of the Commission's Rules to Allocate Spectrum for Mobile-Satellite Services in the 1530-1544 MHz and 1626.5-1645.5 MHz Bands, First Report and Order and Further Notice of Proposed Rulemaking*, 8 FCC Rcd 4246 (June 11, 1993).

Inmarsat cites, intersystem preemption is not required today in the United States. Thus, there is no basis for Inmarsat's concern that retention of the domestic footnotes will somehow require intersystem preemption.

IV. THE COMMISSION SHOULD MAINTAIN FOOTNOTE US309

MSV urges the Commission to reject Inmarsat's proposal that the Commission delete footnote US309, which authorizes terrestrial base stations to operate in the upper L-band to extend or supplement satellite-to-aircraft links. *See* Comments of Inmarsat at 6. While Inmarsat claims that it is not aware of any terrestrial operations pursuant to footnote US309, there is no basis on which to conclude that such terrestrial operations may not serve a useful purpose in the future.

Inmarsat also argues that the Commission should discourage use of such terrestrial base stations to avoid congestion in the L-band. *See* Comments of Inmarsat at 6. Again, there is no basis for Inmarsat's concern. The Commission recently authorized L-band MSS operators to deploy terrestrial base stations to supplement their satellite service and concluded that such operations would not impact the amount of spectrum available in the L-band. *See ATC Order.* The type of terrestrial operations contemplated by footnote US309 is entirely consistent with this decision.

As an alternative to deleting footnote US309, Inmarsat argues that the footnote should be replaced with the corresponding international footnotes 5.357 and 5.376. *See* Comments of Inmarsat at 6. MSV urges the Commission to reject this proposal as well. Footnote US309 allows for operation of terrestrial base stations throughout the entire 28 MHz of upper L-band spectrum whereas the international footnotes limit such operations to only 20 MHz of this spectrum (1545-1555 MHz and 1646.5-1656.5 MHz). *Compare* 47 C.F.R. § 2.106, footnote US309 *with* 47 C.F.R. § 2.106, footnotes 5.357 and 5.576. There is no basis for limiting the

amount of spectrum in which the terrestrial base stations contemplated by footnote US309 can operate. Inmarsat's proposal should be rejected accordingly.

Conclusion

For the reasons stated above, MSV requests that the Commission act consistently with the views expressed herein.

Respectfully submitted,

MOBILE SATELLITE VENTURES SUBSIDIARY LLC

Bruce D. Jacobs
David S. Konczal
SHAW PITTMAN LLP
2300 N Street, N.W.
Washington, D.C. 20037
(202) 663-8000

Lon C. Levin
Vice President
MOBILE SATELLITE VENTURES SUBSIDIARY LLC
10802 Park Ridge Boulevard
Reston, Virginia 20191
(703) 390-2700

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